



Quality Assurance Stand at KSU

Status Update and Test Results

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Outline

- What's new
- Quality Tests status and L2 results
- Conclusions



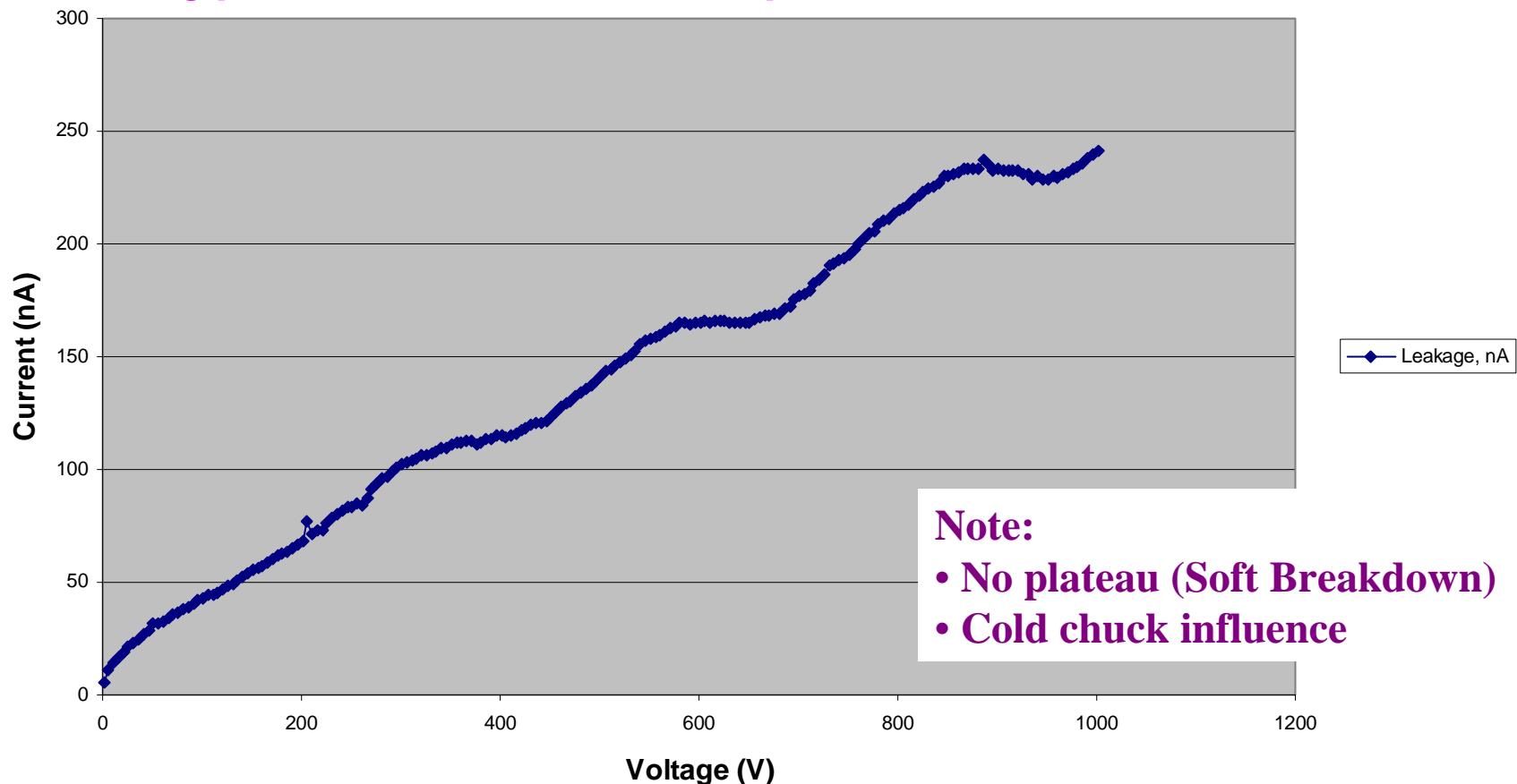
What's new

- Cold Chuck
- First batch of L2 tested
 - ◆ Poly silicon out of specifications
- New batch 10 L2 sensors arrived
 - ◆ 03 was tested
- New software package
 - ◆ HP 34970A 8x4 matrix
 - ◆ New output format XML



Hamamatsu L2 prototype

- Leakage Current
 - ◆ Typical behavior example

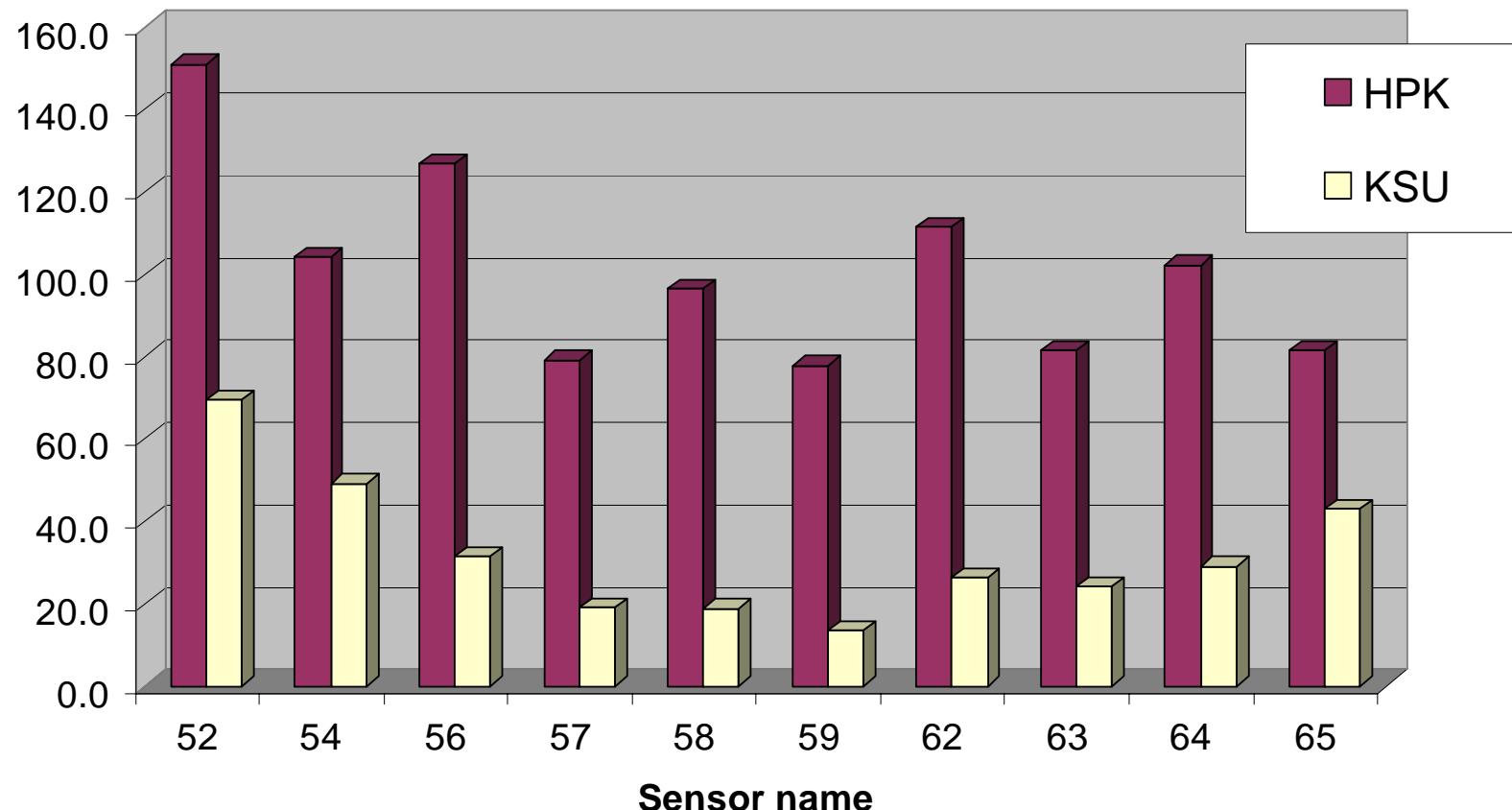




Hamamatsu L2 prototype

- Leakage Current comparison

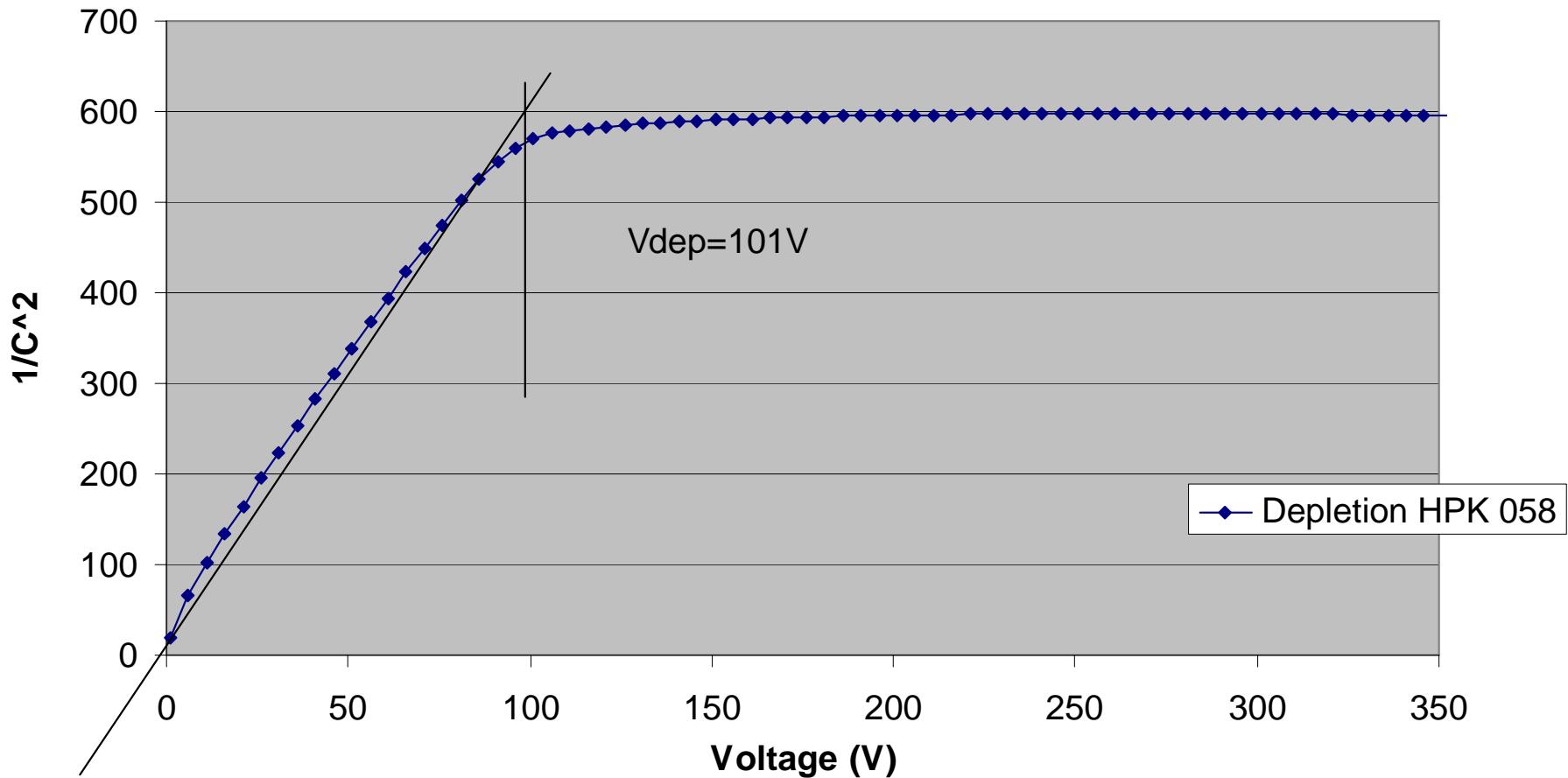
Leakage at 100V bias





Hamamatsu L2 prototype

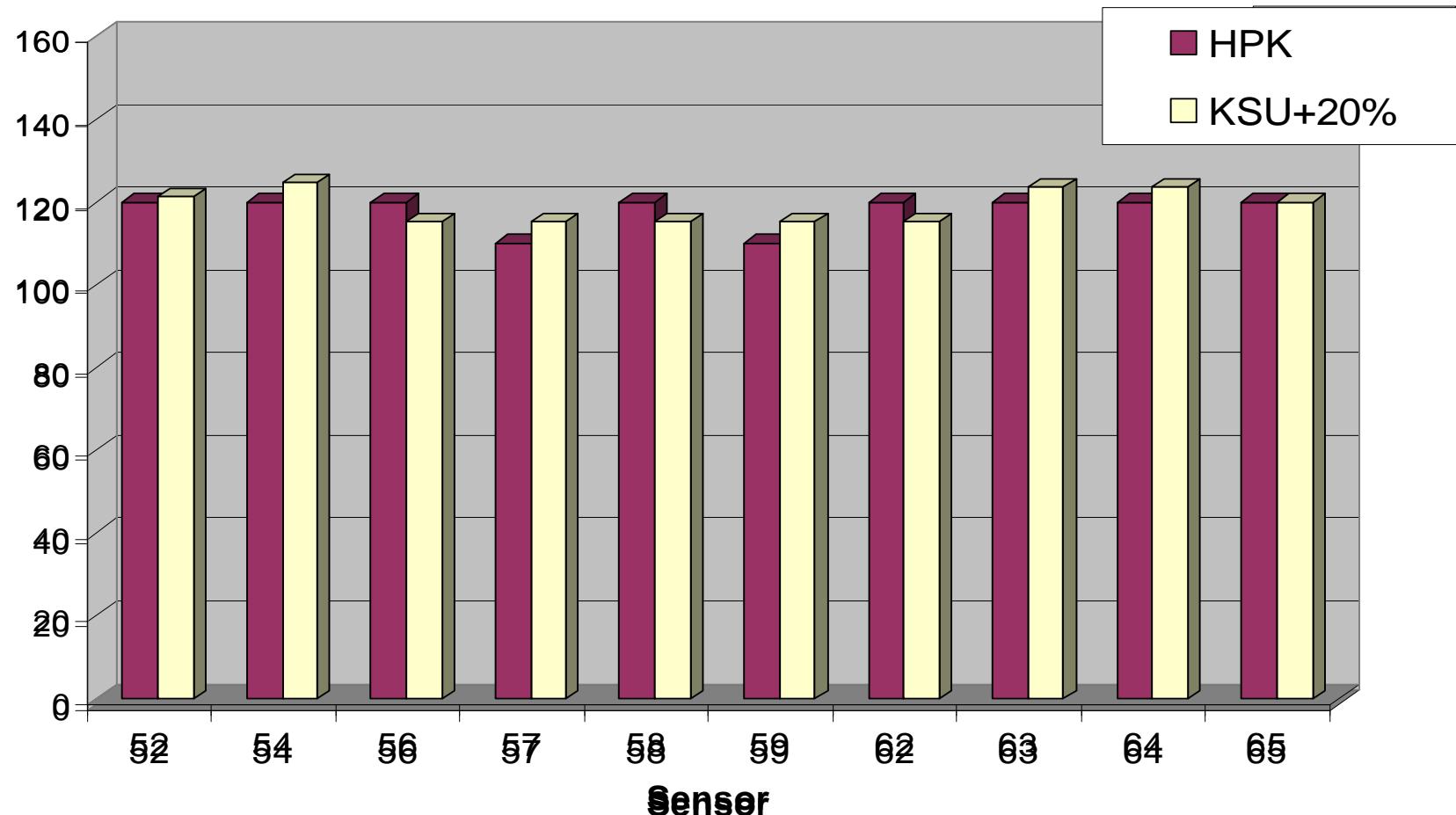
- Depletion Voltage Typical Example





Hamamatsu L2 prototype

- Depletion Voltage Comparison





Hamamatsu L2 prototype

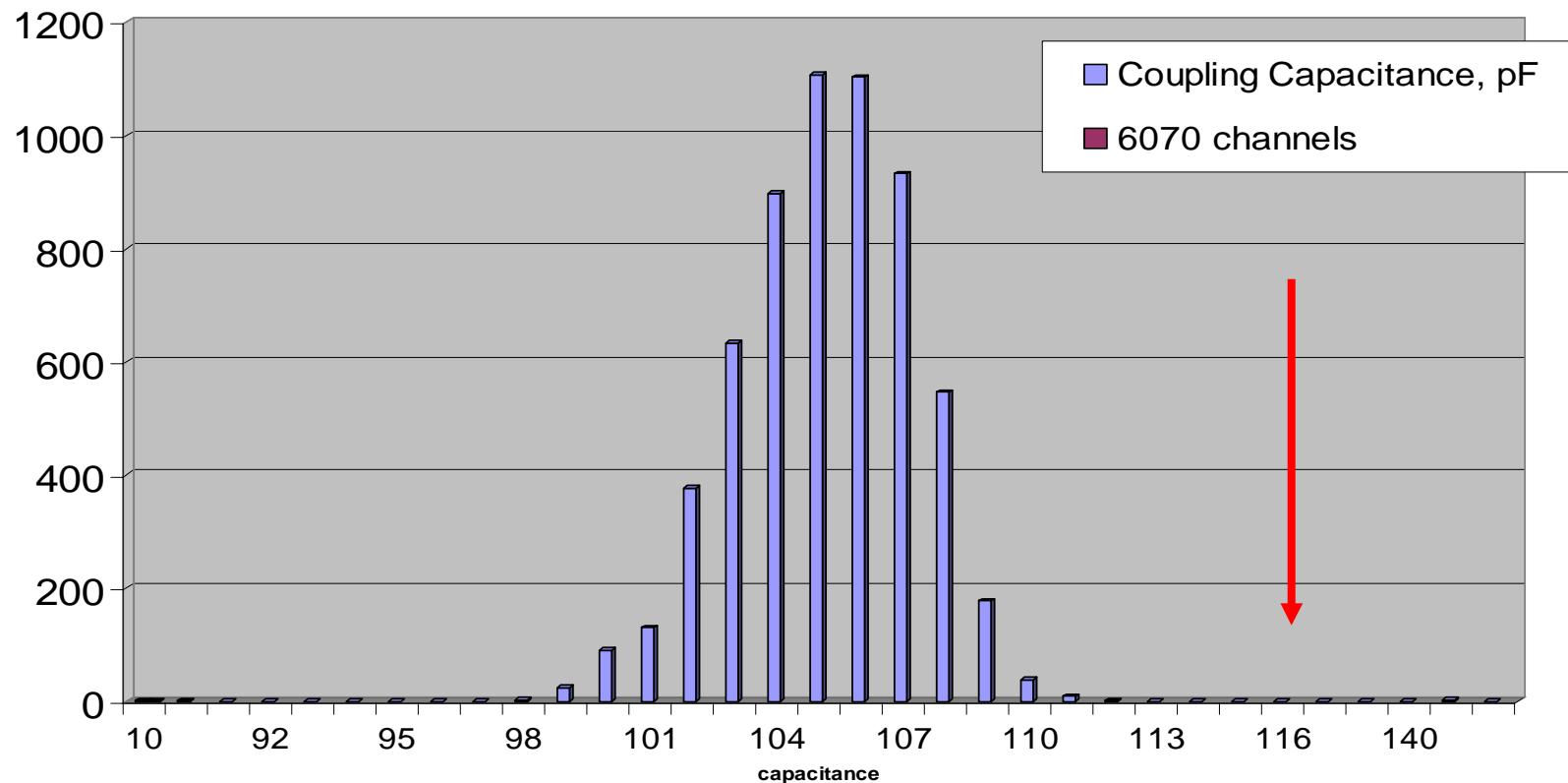
- Strip Measurements

- ◆ HPK claims 2 bad channels on 065
- ◆ KSU result 6 bad channels overall
- ◆ Coupling Capacitance setup was changed implementing DC neighboring strip to detect shorts



Hamamatsu L2 prototype

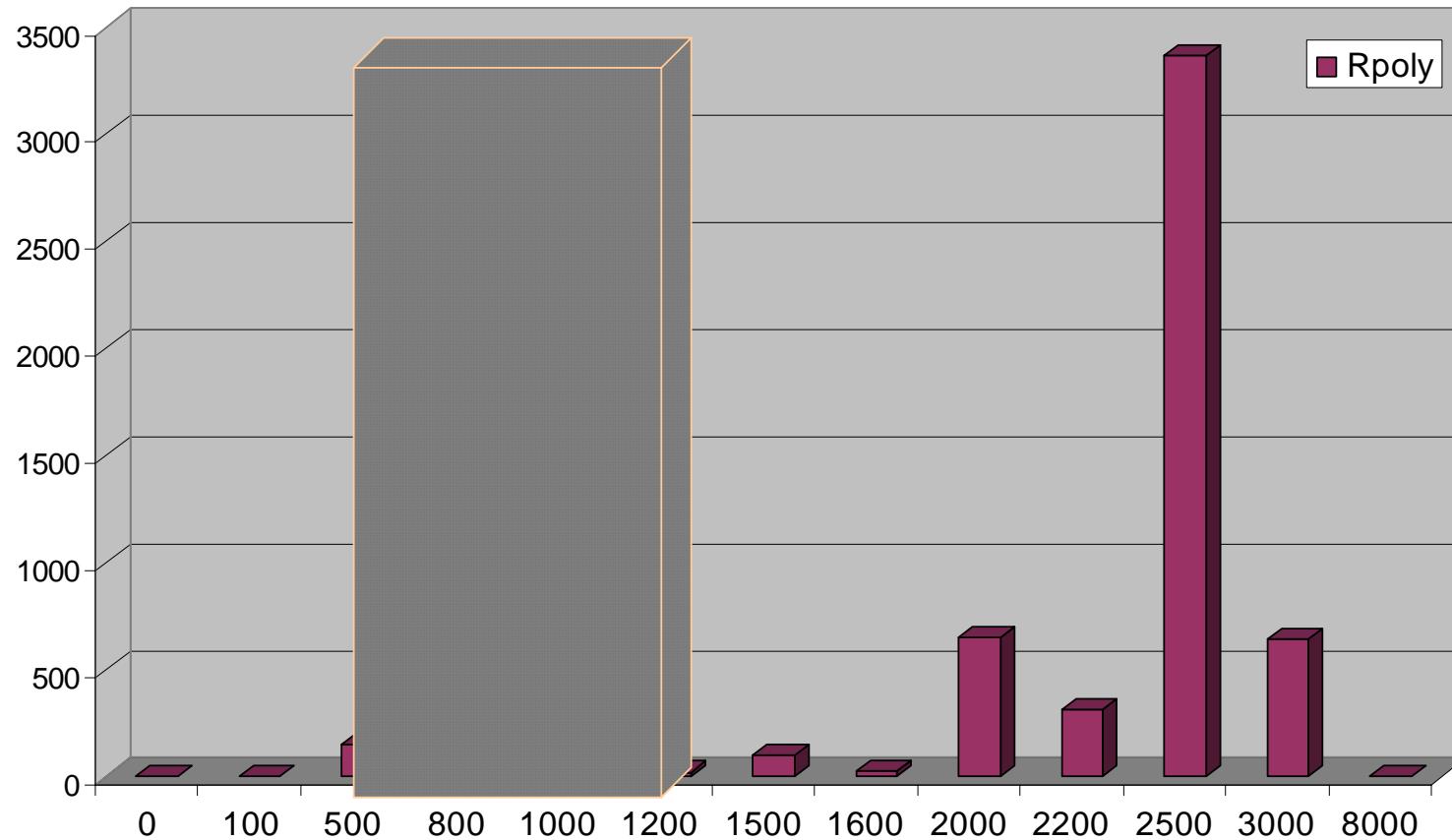
- Strip Measurements
 - ◆ Coupling capacitance @ 1kHz





Hamamatsu L2 prototype

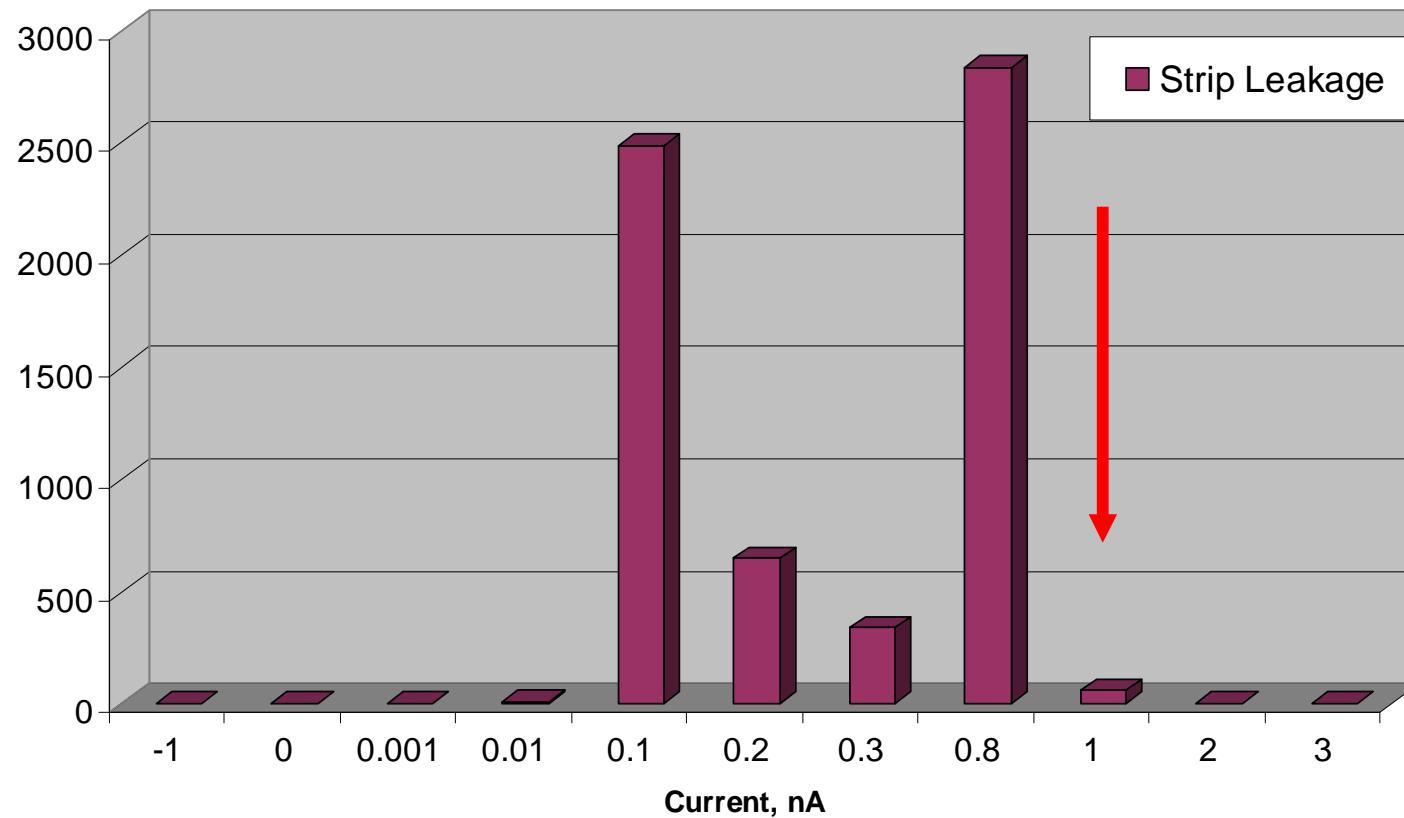
- Strip Measurements
 - ◆ R poly





Hamamatsu L2 prototype

- Strip Measurements
 - ◆ Strip leakage current





Last Slide

- L2 sensors
 - ◆ Visual inspection was skipped up to now
 - ◆ All characteristics within specifications except poly silicon resistor
- New software package
 - ◆ Input file will define all testing parameters
 - ◆ Data base and output format - did do yet